that sinking feeling and found out my day was getting worse.

After answering a gauntlet of questions, I found out that little soda bottle, which I had thought was harmless, actually had exploded in the shop. It blew up with so much force that it knocked a five-pound radio off the shelf, sprayed hazmat all over the shop, and actually got into mouths, eyes and noses of three people. It barely missed hitting another shipmate in the head when it exploded.

The only good news was that the guys who went to the hospital were OK. In fact, they were back at work the next day.

My pride took a huge hit, but I was thankful no one was injured seriously in this incident. This event is something I never will forget; neither will my shipmates—they remind me regularly.

I learned two valuable lessons: Spray-Nine doesn't have any warning about transferring the chemical into other containers, but anytime you transfer hazmat into a temporary container, it should be an approved one. I hope my near-tragic, big-bang mistake will make others aware of this danger.

Petty Officer Allenbaugh works in the airframes shop at VAW-124.

Tire Change Gone Bad

By AD1 David Coffelt

How does a simple tire change become the most embarrassing and potentially deadly mishap in my 15-year career as a flight engineer? The answer is found in one very simple three-letter acronym: ORM (operational risk management) or better yet, the lack of ORM.

A routine four-day NALO mission in our C-130T from the East Coast to the Mediterranean to drop off cargo and personnel seemed like a piece of cake. After the first 10-hour day of flying, we landed in Lajes, Azores. The following morning, the transient alert sergeant called to tell me that our C-130T was leaning right wing down and a little aft. I immediately thought about the preflight I had done with my trainee before leaving home base. Did I miss something that could have been fixed at that point? After a short ride to the aircraft, we discovered our starboard, aft main-mount tire was flat.

Normally, this situation would not pose a problem. However, we were at an airfield with no tools or parts

How much damage can be done when jacks fall? These photos show the damage, but it could have been worse.

support, and we had 30,000 pounds of cargo on board, which meant it was a problem! We needed a game plan to fix the flat tire.

First, the plane needed to be as light a possible to change the tire. The cargo handlers in Lajes were kind enough to download and store the cargo. Second, the aircraft needed to be stabilized. The "milk stool," a wooden stool used to stabilize the ramp while loading and unloading cargo, was placed under the cargo door to prevent the aircraft from settling further. Third, we called the squadron to send a new tire and a crew to change it. Three days later, we had our parts and pit crew to change the tire. The crew arrived at 2330 local time, but they were tired and had jet lag.

We had anticipated the crew's arrival and were ready with two jacks capable of supporting a C-130T, as well as a nitrogen cart to inflate the new tire. At this point, the job was looking good. My two primary concerns were that it was nighttime and that the crew were very fatigued. We should have used ORM and let everyone rest, taking a fresh look at the problem in the light of day. But we didn't do that, so consider that mistake strike No. 1!

We had all the parts we needed to remove and replace the tire, but we did not have the proper publication for jacking. Rarely, no…never in our training were we ever taught to do any job without the publications. Had we used a little ORM, we would have realized the missing pub should have been a showstopper. But we decided to press on-call that strike No. 2!

We positioned the jack under the jack pad near the starboard aft strut and began to lift. With the jack fully extended, the tire still was not high enough off the ground to remove it from the aircraft. We retrieved a second jack and tow fitting from the cargo compartment of our plane (which would give us an additional four inches of clearance) and attached it to the back of the affected strut. We still did not have enough clearance to remove the tire. In retrospect, this problem should have told us to stop. Two hours had elapsed, everyone involved was thoroughly exhausted, all of our gear was being used, and we still were not in a position to complete the job. However, we decided to press on. The umpire could have yelled, "Strike No. 3!"

We decided to improperly rig the jacks to get the job done. Again, you won't find this "technique" in any manual, nor would I recommend it to anyone in a similar position. We connected the jack to a part of the landing gear that was not a jacking point and began to raise the aircraft. This improvised method failed under the weight of the aircraft.

My trainee's head happened to be next to the jack at the time of failure, and I know he'll never forget the sound. As bad as it was, we were lucky no one was injured or killed when the torque strut gave way, and the aircraft fell to the ground.

Many times during this simple tire change, we simply should have stopped the task. I also believe we could have identified pitfalls and prevented the strut from breaking had we given the pit crew time to rest. We clearly should have used the proper tools and publications for the task, too.

Petty Officer Coffelt is a flight engineer with VR-53.